

Claims

[c1] I claim as my invention:

1. A golf ball comprising:

a core composed of a polybutadiene material; and
a cover encompassing the core, the cover composed of an ionomer material, the cover having a surface including at least eleven sets of dimples covering at least 87% of the surface, each set of dimples having a different dimple diameter than any other set of dimples, the different dimple diameters ranging between 0.124 inch and 0.186 inch, and at least one set of dimples includes a first dimple having a first entry radius and a second dimple having a second entry radius, the first entry radius differing from the second entry radius.

[c2] 2. The golf ball according to claim 1 wherein at least one set of dimples includes a dimple having a first entry angle and a dimple having a second entry angle.

[c3] 3. The golf ball according to claim 2 wherein the first dimple has the first entry radius and the first entry angle, and the second dimple has the second entry radius and the second entry angle.

- [c4] 4. The golf ball according to claim 1 wherein the golf ball has a lift coefficient greater than 0.19 at a Reynolds number of 70,000 and 2000 rpm, and a drag coefficient less than 0.232 at a Reynolds number of 180,000 and 3000 rpm.
- [c5] 5. The golf ball according to claim 1 wherein the golf ball has a lift coefficient greater than 0.21 at a Reynolds number of 70,000 and 2000 rpm, and a drag coefficient less than 0.230 at a Reynolds number of 180,000 and 3000 rpm.
- [c6] 6. The golf ball according to claim 1 wherein at least 382 dimples are partitioned into the at least eleven sets of dimples.
- [c7] 7. The golf ball according to claim 6 wherein 180 dimples of the at least 382 dimples lie within a latitudinal region 40° to 60° above and below an equator of the golf ball.
- [c8] 8. A golf ball comprising:
a core composed of a polybutadiene material;
a cover encompassing the core, the cover composed of an ionomer material, the cover having a surface including at least eleven sets of dimples covering at least 87% of the surface, each set of dimples having a different

dimple diameter than any other set of dimples, the different dimple diameters ranging between 0.124 inch and 0.186 inch, and at least one set of dimples includes a first dimple having a first entry angle and a second dimple having a second entry angle, the first entry angle differing from the second entry angle.

[c9] 9. The golf ball according to claim 8 wherein the golf ball has a lift coefficient greater than 0.19 at a Reynolds number of 70,000 and 2000 rpm, and a drag coefficient less than 0.232 at a Reynolds number of 180,000 and 3000 rpm.

[c10] 10. A golf ball comprising:
a core composed of a polybutadiene material; and
a cover encompassing the core, the cover composed of an ionomer material, the cover having a surface including at least eleven sets of dimples covering at least 87% of the surface, each set of dimples having a different dimple diameter than any other set of dimples, the different dimple diameters ranging between 0.124 inch and 0.186 inch,
wherein the golf ball has a lift coefficient greater than 0.19 at a Reynolds number of 70,000 and 2000 rpm, and a drag coefficient less than 0.232 at a Reynolds number of 180,000 and 3000 rpm.

[c11] 11. The golf ball according to claim 10 wherein at least 382 dimples are partitioned into the at least eleven sets of dimples, and wherein 180 dimples of the at least 382 dimples lie within a latitudinal region 40° to 60° above and below an equator of the golf ball.